

What is claimed:

1. Isolated nucleic acid comprising at least 80% nucleic acid sequence identity to a nucleotide sequence encoding the polypeptide as shown in any one of the SEQ ID NOs 1-6464.

5

2. Isolated nucleic acid comprising at least 80% nucleic acid sequence identity to a nucleotide sequence comprising the full-length coding sequence of the nucleotide sequence as shown in any one of the SEQ ID NOs 1-6464.

10 3. A vector comprising the nucleic acid of Claim 1.

4. The vector of Claim 3 operably linked to control sequences recognized by a host cell transformed with the vector.

15 5. A host cell comprising the vector of Claim 3.

6. The host cell of Claim 5, wherein said cell is a CHO cell, an *E.coli* cell or a yeast cell.

20 7. A process for producing a PRO polypeptide comprising culturing the host cell of Claim 6 under conditions suitable for expression of said PRO polypeptide and recovering said PRO polypeptide from the cell culture.

8. An isolated polypeptide comprising at least 80% amino acid sequence identity to an amino acid sequence of the polypeptide as shown in any one of the SEQ ID NOs 1-6464.

25

9. A chimeric molecule comprising a polypeptide according to Claim 8 fused to a heterologous amino acid sequence.

30 10. The chimeric molecule of Claim 9, wherein said heterologous amino acid sequence is an epitope tag sequence or an Fc region of an immunoglobulin.

11. An antibody which specifically binds to a polypeptide according to Claim 8.

35 12. The antibody of Claim 11, wherein said antibody is a monoclonal antibody, a humanized antibody or a single-chain antibody.

13. A composition of matter comprising (a) a polypeptide of Claim 8, (b) an agonist of said polypeptide, (c) an antagonist of said polypeptide, or (d) an antibody that binds to said polypeptide, in combination with a carrier.

40

14. The composition of matter of Claim 13, wherein said carrier is a pharmaceutically acceptable carrier.

15. The composition of matter of Claim 14 comprising a therapeutically effective amount of

5 (a), (b), (c) or (d).

16. An article of manufacture, comprising:

a container;

a label on said container; and

10 a composition of matter comprising (a) a polypeptide of Claim 8, (b) an agonist of said polypeptide, (c) an antagonist of said polypeptide, or (d) an antibody that binds to said polypeptide, contained within said container, wherein label on said container indicates that said composition of matter can be used for treating an immune related disease.

15 17. A method of treating an immune related disorder in a mammal in need thereof comprising administering to said mammal a therapeutically effective amount of (a) a polypeptide of Claim 8, (b) an agonist of said polypeptide, (c) an antagonist of said polypeptide, or (d) an antibody that binds to said polypeptide.

20 18. The method of Claim 17, wherein the immune related disorder is systemic lupus erythematosis, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis, a spondyloarthropathy, systemic sclerosis, an idiopathic inflammatory myopathy, Sjögren's syndrome, systemic vasculitis, sarcoidosis, autoimmune hemolytic anemia, autoimmune thrombocytopenia, thyroiditis, diabetes mellitus, immune-mediated renal disease, a demyelinating disease of the central or peripheral nervous system, 25 idiopathic demyelinating polyneuropathy, Guillain-Barré syndrome, a chronic inflammatory demyelinating polyneuropathy, a hepatobiliary disease, infectious or autoimmune chronic active hepatitis, primary biliary cirrhosis, granulomatous hepatitis, sclerosing cholangitis, inflammatory bowel disease, gluten-sensitive enteropathy, Whipple's disease, an autoimmune or immune-mediated skin disease, a bullous skin disease, erythema multiforme, contact dermatitis, psoriasis, an allergic disease, asthma, allergic rhinitis, atopic 30 dermatitis, food hypersensitivity, urticaria, an immunologic disease of the lung, eosinophilic pneumonias, idiopathic pulmonary fibrosis, hypersensitivity pneumonitis, a transplantation associated disease, graft rejection or graft-versus-host-disease.

35 19. A method for determining the presence of a PRO polypeptide of the invention as described in any one of SEQ ID NOS 1-6464, in a sample suspected of containing said polypeptide, said method comprising exposing said sample to an anti-PRO antibody, where the and determining binding of said antibody to a component of said sample.

40 20. A method of diagnosing an immune related disease in a mammal, said method comprising detecting the level of expression of a gene encoding a PRO polypeptide of the invention as described in any

WO 2005/016962

one of SEQ ID NOs 1-6464, (a) in a test sample of tissue cells obtained from the mammal, and (b) in a control sample of known normal tissue cells of the same cell type, wherein a higher or lower level of expression of said gene in the test sample as compared to the control sample is indicative of the presence of an immune related disease in the mammal from which the test tissue cells were obtained.

5

21. A method of diagnosing an immune related disease in a mammal, said method comprising (a) contacting a PRO polypeptide of the invention as described in any one of SEQ ID NOs 1-6464, anti-PRO antibody with a test sample of tissue cells obtained from said mammal and (b) detecting the formation of a complex between the antibody and the polypeptide in the test sample, wherein formation of said complex is indicative of the presence of an immune related disease in the mammal from which the test tissue cells were obtained.

10

22. A method of identifying a compound that inhibits the activity of a PRO polypeptide of the invention as described in any one of SEQ ID NOs 1-6464, said method comprising contacting cells which normally respond to said polypeptide with (a) said polypeptide and (b) a candidate compound, and determining the lack responsiveness by said cell to (a).

15

23. A method of identifying a compound that inhibits the expression of a gene encoding a PRO polypeptide of the invention as described in any one of SEQ ID NOs 1-6464, said method comprising contacting cells which normally express said polypeptide with a candidate compound, and determining the lack of expression said gene.

20

24. The method of Claim 23, wherein said candidate compound is an antisense nucleic acid.

25

25. A method of identifying a compound that mimics the activity of a PRO polypeptide of the invention as described in any one of SEQ ID NOs 1-6464, said method comprising contacting cells which normally respond to said polypeptide with a candidate compound, and determining the responsiveness by said cell to said candidate compound.

30

26. A method of stimulating the immune response in a mammal, said method comprising administering to said mammal an effective amount of a PRO polypeptide of the invention as described in any one of SEQ ID NOs 1-6464, antagonist, wherein said immune response is stimulated.

27. A method of diagnosing an inflammatory immune response in a mammal, said method comprising detecting the level of expression of a gene encoding a PRO polypeptide of the invention as described in any one of SEQ ID NOs 1-6464, (a) in a test sample of tissue cells obtained from the mammal, and (b) in a control sample of known normal tissue cells of the same cell type, wherein a higher or lower level of expression of said gene in the test sample as compared to the control sample is indicative of the presence of an inflammatory immune response in the mammal from which the test tissue cells were obtained.

40